

## REMARKS

Reconsideration of this application, as amended, is courteously solicited.

The period for response to the Office Action of October 22, 2001 has been extended by one month to and including February 22, 2002 by the Petition For Extension Of Time attached hereto and made a part hereof. Favorable action with respect thereto is courteously solicited.

A Notice of Appeal has also been filed herewith to ensure that the Examiner has all of the time necessary fully to consider the issues in this case.

### THE OFFICE ACTION OF OCTOBER 22, 2001

First, it is specifically noted that claims 7, 8 and 9 were not rejected in the subject Office Action on any substantive basis, that is, they were not rejected on the basis of any prior art or other ground. Furthermore, the Examiner helpfully indicated during the personal interview of August 14, 2001 that claims of that type, as in claims 7, 8 and 9, would appear to be allowable over the prior art. The applicant respectfully requests confirmation in this regard.

Second, it is also specifically noted that claims 3, 4, 10, 11 and 13 through 15 were rejected in the subject Office Action only on the basis of the Richey et al. reference. Since, as established herein, the Richey et al. reference is not in any respect prior art to the subject patent application, it is believed these claims are allowable as well.

Third, only claims 1, 2 and 6 were rejected in the subject Office Action on the basis of other prior art references (the patents to Wickramanayake and Hagen et al.) which are herein distinguished as to the question of patentability under either 35 U.S.C. § 102 or 35 U.S.C. § 103. Accordingly, it is believed these claims are allowable as well.

The Office Action of October 22, 2001 still does not indicate whether or not the drawing has been accepted in this case. Clarification as to this issue is again respectfully requested.

More specifically, the Office Action rejected claims 1 through 4, 11 and 13 through 15 under 35 U.S.C. 102(a) "*as being anticipated by Richey et al. in 'Improved Ozone Quenching With Calcium Thiosulfate.'*"

The Office Action goes on to state that "*Richey et al. teach a method for treating water comprising disinfecting the water with ozone in a treatment system, wherein the system includes an ozone quenching system. In the ozone quenching system, an ozone quenching chemical is added directly to the water as it passes through the treatment system, in an amount to reduce the dissolved ozone concentration to non-detectable levels without reacting with chlorine added downstream to produce by-products. The untreated water provided to the treatment system of Richey et al. would not be potable without the treatment, and therefore may be considered as wastewater. Richey et al. teach that calcium thiosulfate has advantages as the ozone quenching chemical.*"

The applicant hereby again respectfully establishes that Richey et al. is not prior art relative to the subject invention under 35 U.S.C. 102 and thereby cannot be relied upon in rejecting any claims in this case. As stated clearly on the last page of Richey et al., it was presented at the International Ozone Conference in Orlando, Florida, on October 3, 2000. The instant patent application was filed in the United States Patent and Trademark Office on

February 23, 2000 more than seven (7) months before. Accordingly, the applicant again respectfully requests that the citation of and reliance upon Richey et al. be withdrawn.

The Office Action rejected claims 1, 2 and 6 under 35 U.S.C. 102(b) "*as being clearly anticipated by Wickramanayake (column 4, lines 47-52; column 9, lines 56-59). Wickramanayake teaches a method for treatment of soils contaminated with organic pollutants. In this method of Wickramanayake, the work material is a gas mixture that has passed through soil; the target constituent is ozone; the treating agent is sodium thiosulfate; and the objective is to quench the ozone.*" It is readily apparent that the Wickramanayake patent neither discloses nor suggests the applicant's invention as defined by the pending claims. It discloses only a method for treating soil through which a gas-ozone mixture is passed. In other words, the gas-ozone mixture is used to treat the soil to remove contaminated organic compounds. The applicant's invention is entirely different and for a different purpose.

Claims 1, 2 and 6 were rejected in the subject Office Action under 35 U.S.C. 102(b) "*as being clearly anticipated by Hagen et al. (abstract; column 18, lines 47-61). In this method of Hagen et al., the work material is a fluid; the target constituent is an oxidant such as ozone; the treating agent is oxidant scavenger particulates which may be sodium thiosulfate particulates; and the objective is to remove the oxidant.*" Again, the subject Hagen et al. reference does not disclose nor suggest the applicant's invention. Therefore, these claims, as amended, are believed clearly allowable. Favorable action thereon is respectfully requested.

Claim 10 was rejected in the subject Office Action under 35 U.S.C. 103(a) "*as being unpatentable over Richey et al. Richey et al. disclose the method described above. The claim differs from Richey et al. by reciting a specific rate of calcium thiosulfate application to the water. It is submitted that one of ordinary skill in the art, when practicing the method of Richey et al., would have been expected to arrive at the optimum rate of calcium thiosulfate*

*application by routine experimentation. In fact, Richey et al. disclose that the ozone quenching agent dose is a function of the ozone concentration in the water, and should be adjusted to reduce the dissolved ozone concentration without adding so much of the agent that the unoxidized agent would react with chlorine added downstream. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the present invention was made, to have applied calcium thiosulfate to the water in the amount recited in instant claim 11, depending on the concentration of dissolved ozone in the water being treated, absent a sufficient showing of unexpected results."*

As heretofore and hereinafter discussed, the Richey et al. reference is not prior art relative to the instant patent application. Therefore, it is believed claim 10 is allowable. The allowance thereof is respectfully requested.

#### THE PERSONAL INTERVIEW OF AUGUST 14, 2001

A personal interview was held between the Examiner, Betsy M. Hoey, and the applicant's attorney, Rodney K. Worrel, on August 14, 2001 at 10:00 a.m. The interview was held in the Examiner's office in the United States Patent and Trademark Office. As recorded in the Interview Summary completed by the Examiner on that date and of record in this case, the reference of Richey et al. and "new reference 5,232,584" were discussed. The pertinence, if any, of these references will be discussed hereafter together with other cited references.

The applicant wishes to thank Examiner Hoey for her courtesy and cooperation during the personal interview.

DECLARATION UNDER 37 C.F.R. § 1.132  
OF DONALD D. HOLBROOK OF EXHIBIT A

Attached hereto and made a part hereof as "EXHIBIT A" is the Declaration Under 37 C.F.R. § 1.132 of Donald D. Holbrook. As set forth in the declaration, Donald D. Holbrook is the sole inventor in this case and President of Ag Formulators, Inc., the assignee of all of his rights in the subject invention and the subject patent application as set forth in the Assignment Of Invention dated February 23, 2000 duly recorded in the United States Patent and Trademark Office.

The declaration establishes, among other matters, that the Richey et al. reference in this case is not prior art to the subject invention and patent application nor is anything stated in the Richey et al. reference. The declaration confirms, as the Examiner has admitted, that the Richey et al. reference was not published until long after the filing of the subject patent application and therefore is not prior art. The declaration further confirms that any date stated in the article was only in regard to testing and consequently further not of any relevance to the subject patent application. Finally, the declaration confirms that the filing date of the subject patent application is earlier than one year after any date upon which any action took place relative to the subject invention which could have any bearing in this case.

The Richey et al. reference is thus not relevant to any issue in this case. In this regard, the applicant's attorney notes that during the personal interview held in this case with the Examiner in the United States Patent and Trademark Office, the Examiner helpfully noted that the Richey et al. reference was not prior art and that she had merely brought it to the applicant's attention.

The applicant, accordingly, again requests that the citation of the Richey et al. reference in the rejection of any of the pending claims be withdrawn and that the affected claims be allowed.

#### DISTINCTIONS IN CLAIMED INVENTION OVER CITED PRIOR ART

Those claims rejected in the Office Action of October 22, 2001 were rejected solely on the basis of the Richey et al. article entitled "Improved Ozone Quenching With Calcium Thiosulfate;" the Wickramanayake United States Patent No. 5,269,943; and the Hagen et al. United States Patent No. 5,700,375. The claims, as amended, are believed clearly allowable thereover for the reasons herein set forth.

First, the Richey et al. reference is not in any respect prior art relative to the subject patent application, or relevant for any other purpose in this case, as heretofore established.

Second, the Wickramanayake United States Patent No. 5,269,943 is cited solely in the rejection of claims 1, 2 and 6 on the basis of the subject matter in column 4, lines 47-52 and column 9, lines 56-59. More specifically, the Office Action states that "Wickramanayake teaches a method for treatment of soils contaminated with organic pollutants. In this method of Wickramanayake, the work material is a gas mixture that has passed through soil; the target constituent is ozone; the treating agent is sodium thiosulfate; and the objective is to quench the ozone." In contrast, in the applicant's invention, as disclosed and claimed, the work material is a fluid, or water, the target constituent is ozone and the treating substance is calcium thiosulfate

(in the preferred embodiment.) In the more narrow pending claims, the calcium thiosulfate is applied to the water before it passes from a water treatment system substantially without the release of undesirable by-products and the ozone in the water is substantially rendered harmless. This is entirely dissimilar from Wickramanayake. In fact, Wickramanayake can most fairly be identified as teaching the application of ozone to contaminated soil to decompose organic compounds in the soil. Accordingly, the pending claims are believed clearly to be allowable over the Wickramanayake reference.

Third, the Hagen et al. United States Patent No. 5,700,375 is cited solely in rejecting claims 1, 2 and 6 on the basis of subject matter in the abstract and column 18, lines 47-61. However, Hagen et al. employs particle loaded membranes as oxidant scavengers in accordance with a method that neither discloses nor suggests the applicant's invention. Accordingly, the pending claims are believed clearly to be allowable over the Hagen et al. reference.

It is respectfully submitted that all of the pending claims are clearly allowable over the prior art for the reason heretofore set forth.

In view of the foregoing, this application is believed to be in condition for allowance.

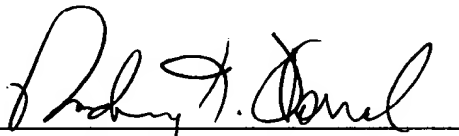
Therefore, prompt Notice of Allowance of the subject application, including claims 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 13, 14 and 15 is respectfully requested.

The applicant, through his attorney of record, authorizes the Examiner to telephone the attorney collect in the event a telephone discussion could be helpful to the prosecution of this application.

Respectfully submitted,

DONALD D. HOLBROOK

BY: WORREL & WORREL

By 

Rodney K. Worrel,  
Registration No. 27,475

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**DECLARATION UNDER 37 C.F.R. §1.132**

**Applicant** : Donald D. Holbrook  
**Serial No.** : 09/511,830  
**Filed** : February 23, 2000 **Art Unit:** 1724  
**For** : METHOD FOR TREATING A WORK MATERIAL  
**Examiner** : Betsy M. Hoey

Honorable Commissioner of Patents  
and Trademarks  
Washington, D. C. 20231

Fresno, California

Sir:

I, Donald D. Holbrook, declare that:

- 1) I reside at 653 Pintail Circle, Fresno, California 93720.
- 2) I am the sole inventor of the above-identified invention of the above-identified patent application now pending before the United States Patent and Trademark Office.
- 3) I am currently employed by Ag Formulators, Inc., having a business address of 5427 E. Central Ave., Fresno, California 93725, to which I have assigned all of my rights in the subject invention and patent application as set forth in the Assignment Of Invention dated February 23, 2000 filed with the subject patent application and duly recorded in the United States Patent and Trademark Office.

- 4) I am currently, and was at the time of the invention herein above stated, employed by Ag Formulators, Inc. as the president.
- 5) I have been employed in this same capacity by Ag Formulators, Inc. for approximately 9 years.
- 6) I am a scientist and have a degree of Bachelor of Science in Soil Science from California State Polytechnic University, at San Luis Obispo.
- 7) The intellectual property lawyer for Ag Formulators, Inc. is Rodney K. Worrel, Registration No. 27,475 before the United States Patent and Trademark Office.
- 8) The intellectual property lawyer for Ag Formulators, Inc., the assignee of the rights herein, has brought to my attention the Office Action of October 22, 2001. With respect to the article cited in the Office Action identified as "Richey et al." and entitled "Improved Ozone Quenching With Calcium Thiosulfate," it is my understanding that the subject Office Action rejects certain of the pending claims of the subject patent application under either 35 USC § 102 and/or 35 USC § 103. It is recognized that all of the claims were not rejected and, in fact claims 7, 8 & 9 appear to be

allowable as a result of the subject Office Action.

- 9) It is clear to me that the "Richey et al." reference is not prior art relative to the subject patent application and the invention thereof.
- 10) The Examiner in the subject Office Action stated, in response to the Amendment of July 26, 2001, that notwithstanding the fact that the "Richey et al." article could not be prior art to the subject patent application for the reasons stated therein, that the "Richey et al." reference could be prior art because of what was stated therein.
- 11) The quotation in the "Richey et al." reference to which the Examiner refers in this regard is "However, the Richey et al. paper states that calcium thiosulfate was used as an ozone-quenching agent at a water treatment plant in February of 1999."
- 12) First, the article of the "Richey et al." reference was not published until long after any date having relevance in this case.

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- 13) Second, the article of the "Richey et al." reference refers only to a test operation.
- 14) Third, the subject patent application was filed on February 23, 2000, which is earlier than one year after any date upon which any action took place relative to the subject invention.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

DATE: 1/14/02

By Donald D. Holbrook

Donald D. Holbrook, President  
Ag Formulators, Inc.

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